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Département à
La Haye
Division de la
recherche

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RICEVUTO

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Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°

03425180.1-2425-

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

CAMPAGNOLO S.R.L.

COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☐ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☒ abstract

☐ title

☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract: 1

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
X	EP 1 238 902 A (SHIMANO KK) 11 September 2002 (2002-09-11)	13-17	H01R13/703 B62J39/00
A	* paragraph '0041!; figures 1-3,15-17 *	1	
X	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 09, 31 July 1998 (1998-07-31) & JP 10 112358 A (SANYO ELECTRIC CO LTD), 28 April 1998 (1998-04-28)	13-17	
A	* abstract; figures 1-7 *	1-3,6,8, 9,12	
X	GB 2 056 684 A (BASTA LAASEFAB AS) 18 March 1981 (1981-03-18)	13-17	
A	* the whole document *	1	
Y	US 2001/027495 A1 (CAMPAGNOLO VALENTINO) 4 October 2001 (2001-10-04)	1-17	
	* the whole document *		
Y	FR 2 609 578 A (LEPAILLIER PATRICK) 15 July 1988 (1988-07-15)	1-17	TECHNICAL FIELDS SEARCHED (Int.CI.7)
	* the whole document *		H01R B62J B62M
A	FR 2 678 781 A (EFFEL ETS) 8 January 1993 (1993-01-08)	1-7,9, 13,17	
	* page 3 - page 7; figures 1,2 *		
A	DE 32 03 845 A (FABEG GMBH) 17 November 1983 (1983-11-17)	1-3,6,8, 9,12-15, 17	
	* the whole document *		
A	US 4 037 186 A (PALMER JAMES E ET AL) 19 July 1977 (1977-07-19)	1-4,6-9, 11-14,17	
	* column 4 - column 9; figures 1-9 *		
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 15 September 2003	Examiner Jung, W
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-12

A unit of a system for controlling the operating functions
of a cycle

2. Claims: 13-17

A complementary unit of a system for controlling the
operating functions of a cycle



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☒ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims; namely claims:

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 42 5180

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

15-09-2003

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 1238902	A	11-09-2002	US	2002127907 A1	12-09-2002
			CN	1374724 A	16-10-2002
			CZ	20020873 A3	16-10-2002
			EP	1238902 A2	11-09-2002
			JP	2002308172 A	23-10-2002

JP 10112358	A	28-04-1998	NONE		

GB 2056684	A	18-03-1981	DK	235479 A	08-12-1980
			DE	3019658 A1	11-12-1980
			FR	2458811 A1	02-01-1981
			IT	1127488 B	21-05-1986
			NL	8003037 A	09-12-1980

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			CN	1319510 A	31-10-2001
			CZ	20011073 A3	14-11-2001
			DE	10115289 A1	04-10-2001
			FR	2807003 A1	05-10-2001
			JP	2001322587 A	20-11-2001
			TW	491789 B	21-06-2002

FR 2609578	A	15-07-1988	FR	2609578 A1	15-07-1988
			FR	2627022 A2	11-08-1989

FR 2678781	A	08-01-1993	FR	2678781 A1	08-01-1993

DE 3203845	A	17-11-1983	DE	3203845 A1	17-11-1983
			DD	207285 A5	22-02-1984
			FR	2520688 A1	05-08-1983

US 4037186	A	19-07-1977	NONE		



This application is covered by the extended European search report pilot project at present running within the European Patent Office, applied to all European patent applications filed as first filing and searched on or after 01.07.03. Under this project the EPO issues together with the search report an opinion on whether the application and the invention to which it relates meet the requirements of the EPC. This non-binding opinion is issued free of charge as a service. This opinion may be used as the basis for an informed decision as to whether it is desired to pursue the application further or not.

For further details of this pilot project, the applicant's attention is directed to the Official Journal edition 5/2003. If any further immediate questions or comments arise the EPO Customer Services: +31-70-340 4500 or +49-89-2399 2828 can be contacted.

The attached opinion reveals that the application or the invention to which it relates appear not to meet the requirements of the Convention (see comments on enclosed Form 2906).

If the applicant wishes to continue with this application the examination fee must be paid. Where appropriate amendments can be filed to address the objections raised in the opinion, thus shortening the overall procedure. If no amendments are filed, the opinion will be re-issued as the first official communication under Article 96(2) and Rule 51(2) EPC.

If the examination fee has already been paid and the right to the communication under Article 96(1) EPC has been waived for this application, the first official communication under Article 96(2) and Rule 51(2) EPC will be issued promptly.



The examination is being carried out on the **following application documents**:

Text for the Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR LI

Description, pages:

1-10 as originally filed

Claims, No.:

1-17 as originally filed

Drawings, sheets:

1/4-4/4 as originally filed

1. Prior Art

The following documents (D) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: EP-A-1 238 902

D2: JP 10 112358 A

D3: GB-A-2 056 684

D4: US 2001/027495 A1

D5: FR-A-2 609 578

2. Clarity

The subject-matter of independent claim 1 is directed to a unit of a system. In this respect the term "... suitable for cooperating with at least one complementary unit ..." in the preamble of independent claim 1 only defines optional features of said unit (cf. Guidelines, C-III, 4.8), which do not extend the subject-matter of said claim in a way to include a complementary unit. However, in the subsequent term of claim 1 "... at least one between said unit and said complementary unit..." defines features of said



complementary unit which results in a lack of clarity concerning the subject-matter of claim 1.

The remaining term of the preamble of claim 1 is vague and unclear and leaves the reader in doubt as to the meaning of the technical features to which it refers.

For example the term "... at least one between said unit and said complementary unit being configured for being selectively removable from the cycle..." is unclear since the preceding terms do not define that these units are attachable to a cycle (for example a remote control is not excluded by the preceding definition).

It is suggested to amend the preamble of claim 1 according to the description and the drawings (e.g. "A system attachable to a cycle for controlling the operating functions of a cycle comprising a unit (21, 22) being connected to a complementary unit (21, 22) by at least one electrical connection (105); said at least one electrical connection (105) can be decoupled (for removing at least one of said unit (21, 22) or said complementary unit (21, 22) from a cycle) thereby leaving exposed at least one distal contact part (107, 108) on said units (21, 22), said system being characterized ..."

3. Novelty, inventive step and unity

3.1 Independent claim 13

The document D1 (fig. 1, 2; par. [41]) discloses (the references in parentheses applying to this document):

A magnet (74) (which can be interpreted as a "complementary unit", since it cooperates with a sensor unit (22)) of a system (20, 32, 34, 36, 22, 74) for controlling the operating functions of a cycle (e.g. the speed), designed for cooperating with a unit (an electrical sensor (22)) according to any one of claims 1 to 12¹, whereby it comprises one actuation element (74) for a switch (76) (in D1 the magnet (74) actuates the reed switch (76) in the sensor (22); cf. par. [41] and fig. 1 and 3)

¹ The magnet as an actuation element (cf. claim 11) is suitable for cooperating with a unit as defined in claim 1 (cf. Guidelines, C-III, 4.8). However, this is only an optional feature and does not restrict the magnet to cooperate with another unit (a sensor (22)), as disclosed in D1.



The subject-matter of claim 13 is therefore not new (Article 54(1) and (2) EPC).

Also D2 (abstract; fig. 1-7) and D3 (fig. 1-5; page 1, l. 58 - 99) disclose, respectively, all the features of claim 13.

3.2 Independent claim 1

Furthermore, the above-mentioned lack of clarity notwithstanding, the subject-matter of claim 1 does not involve an inventive step in the sense of Article 56 EPC for the following reasons:

Document D4 (fig. 1-4; par. [14] - [43]), which is considered to represent the most relevant state of the art, discloses

A system (10, 20, 12) attachable to a cycle for controlling the operating functions of a cycle comprising a unit (20) being connected to a complementary unit (10) by three electrical connections ((84)-(86)); said electrical connections can be decoupled (cf. par. [19]) for removing said complementary unit (10) from a cycle thereby leaving exposed three distal contact parts (contact parts of lines (84), (85) and (86) in fig. 3) on said units (10, 20).

The subject-matter of claim 1 differs from D4 in the features of the characterizing portion of claim 1, i.e. that at least one switch is associated to said at least one electrical connection, whereby the former can be selectively actuated for electrically insulating said exposed distal parts from said unit.

The problem to be solved by the present invention may therefore be regarded as to increase the safety of the electrical connections ((84)-(86)) after decoupling (e.g. to prevent a short circuit at the distal contact parts by water dust, humans etc.).

The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Articles 52(1) and 56 EPC) for the following reasons:

Document D5 (fig. 1-3; pages 5-7) discloses electrical connections ((131) - (133)) which are insulated by switches ((81) - (83)) after actuation of a reed switch (10) with a magnet (17). Thus, D5 is providing the same advantages as in the present application. The skilled person would therefore regard it as a normal option to include this feature in the electrical connections of the units (10 and 20), described in document D4, in order to solve the problem posed.



3.3 Dependent claims 2-12 and 14-17

Dependent claims 2-12 and 14-17 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the EPC with respect to novelty and/or inventive step, the reasons being as follows:

A combination of D4 (fig. 1-4; par. [14] - [43]) with D5 (fig. 1-3; pages 5-7) discloses all the additional features of claims 2-12 and 14-17.

D1 (fig. 1, 2; par. [41]), D2 (abstract; fig. 1-7) and D3 (fig. 1-5; page 1, l. 58 - 99) disclose, respectively, all the additional features of claims 14-17.

3.4 Lack of unity

Since the subject-matter of independent claims 13-17 is not novel, the two groups of inventions comprising claims 1-12 and 13-17 do not include any common special technical features according to Rule 30(1) EPC. Therefore these two groups of inventions are not so linked as to form a single general inventive concept (cf. Article 82 EPC).

4. **Suggestion**

The variant embodiment as illustrated in figures 3 and 4 (and description pages 7 et seqq.) of the current application describes a plurality of reed switches on both units which are activated by magnets on both units. A combination of these features could serve as a basis for a new and allowable independent claim.

5. **Further procedure**

- 5.1 The applicant is requested to file new claims which take account of the above comments and comply with Rule 29(2) EPC.
- 5.2 When drafting a new independent claim, the two-part form should be used in accordance with Rule 29(1) EPC. The applicant should also indicate in the letter of reply the difference of the subject-matter of the new claim vis-à-vis the state of the art and the significance thereof.



- 5.3 The description should be adapted to any new claims to be filed (Art. 84 and Rule 27(1)(c) EPC).
- 5.4 To meet the requirements of Rule 27(1)(b) EPC, the document D5 should be identified in the description and the relevant background art disclosed therein should be briefly discussed.
- 5.5 The preamble of a new claim should be based on D4. (Rule 29(1)(a) EPC).
- 5.6 In order to facilitate the examination of the conformity of the amended application with the requirements of Article 123(2) EPC, the applicant is requested to clearly identify the amendments carried out, irrespective of whether they concern amendments by addition, replacement or deletion, and to indicate the passages of the application as filed on which these amendments are based.

If the applicant regards it as appropriate these indications could be submitted in handwritten form on a copy of the relevant parts of the application as filed.